## Figure la

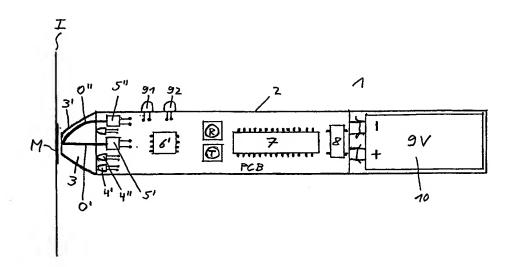


Figure 1b

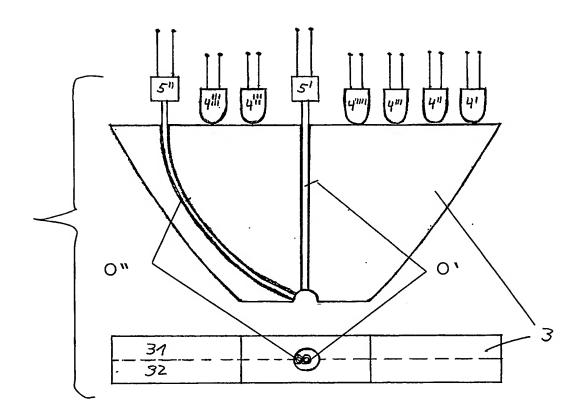


Figure 1c

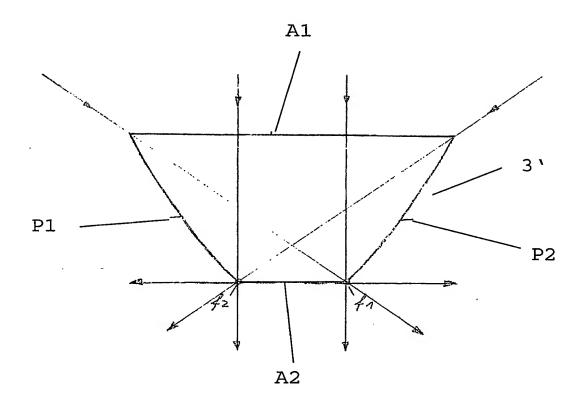


Fig Z

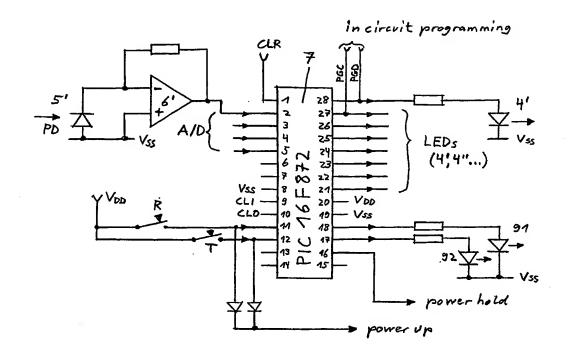


Figure 3a

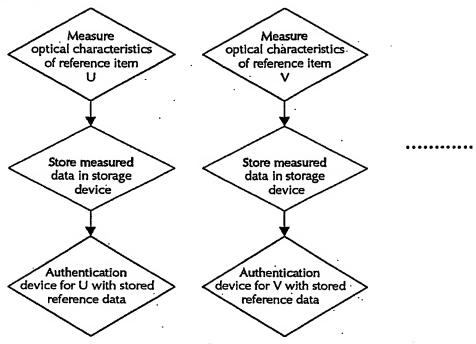
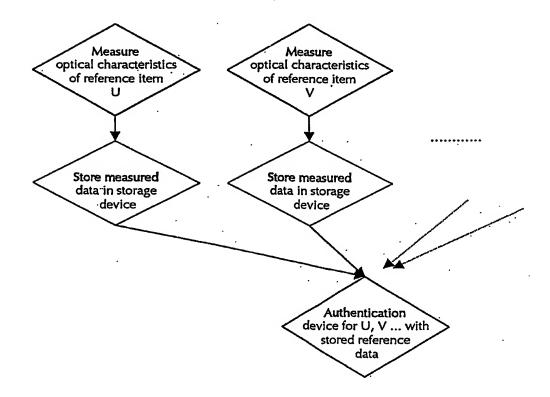


Figure 3b



Authentication device for U with stored reference data

Compare measured data with stored reference data

passed

Authentication Measure optical characteristics of testing item

U'

Failed

Measure optical characteristics of reference item

Store measured data in storage device

Compare measured data with stored reference data

passed

passed